

THE BLACK HALICTINE BEES OF THE PHILIPPINE ISLANDS

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The black halictine bees of the Philippines have all been referred to the genus *Halictus*; but the subgenus *Nesohalictus*, of Crawford, remarkable for its very long tongue, may be elevated to generic rank.

Genus NESOHALICTUS Crawford

Halictus subgenus *Nesohalictus* CRAWFORD, Proc. U. S. Nat. Mus. 38 (1910) 120.

"Closely resembles *Halictus*, but differs by the greatly elongate tongue, which is about as long as the antennæ, by having the inner spur of the hind tibiæ in the male armed with a few large teeth, and by having all the transverso-cubital veins, the cubitus beyond the second transverse cubital, and the upper two-thirds of the second recurrent vein, obsolescent." (*Crawford.*) This diagnosis was based on the male.

The female is larger (about 7.5 millimeters long), with the basitarsi piceous (they are ferruginous in the male); the hind spur has long spines. On account of the long linear tongue the genus is related to *Thrinchostoma*, but it differs in the structure of the hind legs, the absence of the hair patch on the wings of the male, and in other ways. The clypeus of the male is entirely black, flattened and shining in the middle.

Nesohalictus robbii (Crawford).

Halictus (Nesohalictus) robbii CRAWFORD, Proc. U. S. Nat. Mus. 38 (1910) 120.

LUZON, Manila (*M. L. Robb and R. E. Brown*): Laguna Province, Mount Maquiling (*C. F. Baker*), Los Baños (*Baker*). PANAY, Antique Province, Culasi (*R. C. McGregor*), June, 1918; Maralison Island (*McGregor*), June 18, 1918. MINDANAO, Dapitan, Davao, and Cagayan (*Baker*). Another species of this genus, *Nesohalictus lativentris* (*Halictus lativentris* Friese), occurs in Java.

Genus HALICTUS Latreille

The metallic species have been previously described, but one described below (*H. opisthochlorus*) is partly metallic. The

species of *Halictus* are ground-nesting bees of relatively feeble flight, and the wide distribution of several species through the islands of the Archipelago is rather surprising. The smaller species are sometimes referred to as sweat bees, from their habit of settling on the skin, apparently attracted by the perspiration. Is it perhaps possible that they occasionally attach themselves to birds, and thus get carried about? The following key should suffice for the separation of the species before me. I include *Nesohalictus*, as it is likely to be mixed with *Halictus*.

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|--|---|
| Males | 1. |
| Females | 8. |
| 1. Clypeus with a yellow or whitish transverse apical band..... | 2. |
| Clypeus entirely black..... | 4. |
| 2. Tibiæ yellow, with dark markings; scape with a light stripe; area of metathorax not plicate or only very delicately so near base. | |
| | eschscholtzi sp. nov. |
| Tibiæ mainly or wholly dark..... | 3. |
| 3. Flagellum ferruginous beneath; hind tarsi or, at least, basitarsi yellow. | |
| | philippinensis Ashmead. |
| Flagellum dark or dusky beneath; hind tarsi dark. | |
| | philippinensis nigritarsellus var. nov. |
| 4. Mesothorax dull or dullish..... | 5. |
| Mesothorax shining..... | 6. |
| 5. Larger; stigma pale ferruginous; tarsi light red. | |
| | Nesohalictus robbii Crawford. |
| Smaller; stigma dark brown; tarsi dark..... | melanurops sp. nov. |
| 6. Head very large; scape largely red; anterior knees red.... | scapalis sp. nov. |
| Head not unusually large..... | 6a. |
| 6a. Very small species; mesothorax highly polished, without conspicuous punctures | lionotulus sp. nov. |
| Small species; mesothorax shining, but finely and distinctly punctured. | |
| | itaminus sp. nov. |
| Larger; mesothorax with evident punctures..... | 7. |
| 7. Mesothorax coarsely punctured; first abdominal segment closely punctured all over..... | baguionis Crawford. |
| Mesothorax polished, more finely punctured; first abdominal segment without evident punctures..... | luzonicus Strand. |
| 8. Tibiæ mainly yellow or reddish yellow; tubercles yellow. | |
| | eschscholtzi sp. nov. |
| Tibiæ and tubercles not thus yellow..... | 9. |
| 9. Mesothorax dull, without evident sculpture..... | 10. |
| Mesothorax more or less shining or evidently sculptured..... | 12. |
| 10. Metathorax dark green (Baguio)..... | opisthochlorus sp. nov. |
| Metathorax black, the area granular, without evident sculpture..... | 11. |
| 11. Apical part of metathoracic area shining and with a median groove (Puerto Princesa)..... | caroli sp. nov. |
| Apical part of area entirely dull; larger species (Culasi and Mount Maquiling) | mcgregori sp. nov. |

12. Area of metathorax entirely dull, very coarsely reticulate.
thoracicus sublustrans subsp. nov.
 Area of metathorax shining or closely sculptured.....13.
13. Large species, with dark tegulæ and very coarsely punctured mesothorax; apical area of first abdominal segment closely punctured.
baguionis Crawford.
 Mesothorax not thus coarsely punctured.....14.
14. Scutellum sparsely punctured.....15.
 Scutellum closely or finely punctured, often dullish or dull.....22.
15. Scutellum dullish, with large, very sparse punctures; mesothorax dull, with large sparse punctures (Mount Banahao).... *oligostictus* sp. nov.
 Scutellum shining; mesothorax with fine or close punctures.....16.
16. Mesothorax highly polished, little punctured; tegulæ amber.....17.
 Mesothorax dull or distinctly punctured.....18.
17. Hind margins of abdominal segments testaceous; area of metathorax distinctly striate, except the shining apical part (Mount Maquiling).
lionotulus sp. nov.
 Hind margins of abdominal segments not testaceous; area of metathorax not distinctly sculptured (Mount Banahao).
scintillans sp. nov.
18. Head very large; scape largely red; anterior knees red in male; female unknown (Mount Banahao)..... *scintillans* sp. nov.
 Head not large; scape dark; abdomen with distinct bands of tomentum at bases of at least some of the segments.....19.
19. Larger species; middle of hind basitarsi with ferruginous hair on inner side; mesothorax shining and with very distinct punctures.
luzonicus Strand.
 Smaller species; basitarsi without strongly red or orange hair.....20.
20. Stigma pale testaceous; area of metathorax shining, with very distinct longitudinal plicæ; first abdominal segment with a tuft of white hair on each side..... *philippinensis* Ashmead.
 Stigma dark.....21.
21. Disk of mesothorax very sparsely punctured; posterior truncation of metathorax brilliantly shining (Baguio)..... *postlucens* sp. nov.
 Disk of mesothorax much more closely punctured; posterior truncation dull or dullish, except upper end..... *itaminus* sp. nov.
22. Hind margins of at least some of the abdominal segments pale testaceous; tegulæ rufotestaceous; stigma dull reddish, not dark.....23.
 Hind margins of abdominal segments not testaceous.....25.
23. Testaceous band on second abdominal segment in middle occupying about half of segment; first segment with broad testaceous margin; hind tibiæ and tarsi dull reddish (Mount Maquiling).
fulvovittatus sp. nov.
 Testaceous band on second abdominal segment, if present, not occupying a fourth of segment.....24.
24. Larger; truncation of metathorax distinctly margined above (Davao).
davaonis sp. nov.
 Smaller; truncation not bounded above..... *nesiotus* Crawford.
 Like the last, but more robust, with red knees and redder tegulæ.
nesiotus domitus var. nov.

25. Second abdominal segment wholly without basal band or patches of tomentum; mesothorax dull; punctures of scutellum very irregular; area of metathorax dullish, with strong plicæ (Mount Banahao and Imugan)..... melanurops sp. nov.
 Second abdominal segment with basal band or lateral patches of tomentum26.
26. First recurrent nervure meeting second transverse cubital; tongue linear.
 Nesohalictus robbii (Crawford).
 First recurrent nervure joining second submarginal cell; mouth parts ordinary for the genus; hair of postscutellum light fulvous.
 banahaonis Cockerell.

Halictus itaminus sp. nov.

Female.—Length, about 6 millimeters; black, with thin white hair, conspicuous on sides of thorax and forming a dense tomentum on postscutellum; head normal, face broad but eyes strongly converging below, clypeus somewhat produced; mandibles black, reddish at end; underside of head flattened, finely and densely striate; antennæ dark, the flagellum faintly brownish beneath; front dull, extremely densely punctured; clypeus irregularly punctured; mesothorax shining but not highly polished, the punctures distinct and well separated, the median groove well developed; scutellum convex, shining, sparsely punctured, with no median groove (*H. gedensis* has it dullish, with a median groove); area of metathorax appearing roughened (but under microscope seen to be reticulated) at middle and base, the posterior part at side being smooth (microscopically tessellate), while the posterior middle is somewhat swollen, with a median depression; posterior truncation dull except upper part, which is shining, its sides angular; sides of thorax dull, except a shining area below the wings; tegulæ piceous; wings dusky, stigma (which is large) and nervures piceous; first recurrent nervure meeting second transverse cubital; legs black, with pale hair; hind spur with long spines; abdomen shining, with white hair bands, broadest laterally (not always clearly visible) at bases of second and third segments; venter with white hair.

Male.—Very much like the female, but smaller and slenderer; clypeus entirely black; legs entirely dark; mesothorax shining.

LUZON, Laguna Province, Mount Maquiling, 10 females and 8 males (the type is a female); Mount Banahao, 1 female: Mountain Province, Baguio, 1 female. All from Baker.

This is very close to certain species of Java, *H. gedehensis* Friese and especially *H. gedensis* Ckll., differing from the latter especially in the scutellum, as is indicated in the preceding description.

Halictus nesiotus Crawford.

Halictus nesiotus CRAWFORD, Proc. Ent. Soc. Washington 19 (1918) 169.

LUZON, Mountain Province, Baguio (*Wirt Robinson*), type locality: Laguna Province, Mount Maquiling (*Baker*), 4 females; Mount Banahao (*Baker*), 1 female. I have not seen Crawford's type, but he has kindly confirmed my identification from a specimen sent to him.

Halictus nesiotus var. *domitus* var. nov.

Another specimen from Mount Banahao is more robust, with red knees, bright ferruginous tegulæ, and third and fourth abdominal segments (but not first and second) rather broadly margined with testaceous. It may be a distinct species, but for the present it may stand as a variety.

Halictus baguionis Crawford.

Halictus baguionis CRAWFORD, Proc. Ent. Soc. Washington 19 (1918) 170.

LUZON, Mountain Province, Baguio (*Robinson, Baker*): Mount Banahao (*Baker*): Nueva Vizcaya Province, Imugan (*Baker*).

This species appears to be abundant at Baguio, but a few specimens have been seen from other localities. I have one of Crawford's cotypes.

Halictus luzonicus Strand.

Halictus luzonicus STRAND, Berl. Ent. Zeitschrift 54 (1909) 208.

? *Halictus manilæ* ASHMEAD, Canad. Ent. 36 (1904) 281.

Halictus manilæ COCKERELL, Proc. U. S. Nat. Mus. 36 (1909) 420; CRAWFORD, Proc. Ent. Soc. Washington 19 (1918) 169, 170.

Strand's type was from Luzon (*Jagor*); Ashmead's, from Manila (*Stanton*). Ashmead's type, preserved in the United States National Museum, is the same as *H. luzonicus*; but Ashmead's description states that the insect, a female, is only 6 millimeters long, and the head from the base of the antennæ upward is greenish metallic. It appears probable that Ashmead began his description with one thing and finished with another, accidentally picking up the wrong specimen. At all events, I know of no species agreeing with his description and prefer to use the name *luzonicus*, which is supported by a full and accurate account of the characters.

LUZON, Mountain Province, Baguio (*Robinson, Baker*): Laguna Province, Los Baños (*Baker*); Mount Maquiling (*Baker*):

Nueva Viscaya Province, Imugan (*Baker*). It appears to be abundant at Baguio, but is represented by a few specimens from the other localities.

Halictus philippinensis Ashmead.

Halictus philippinensis ASHMEAD, Proc. U. S. Nat. Mus. 28 (1904) 128; COCKERELL, Proc. U. S. Nat. Mus. 36 (1909) 419; CRAWFORD, Proc. Ent. Soc. Washington 19 (1918) 169, 170.

LUZON, Manila (*Stanton*): Laguna Province, Los Baños (*Baker*); Mount Maquiling (*Baker*): Mountain Province, Baguio (*Baker*): Tayabas Province, Malinao (*Baker*). LEYTE, Tacloban (*Baker*). PANAY, Antique Province, Culasi (*McGregor*), June, 1918. NEGROS, Cuernos Mountains (*Baker*). MINDANAO, Davao (*Baker*); Cagayan (*Baker*); Zamboanga (*Baker*). BASILAN (*Baker*). PALAWAN, Puerto Princesa (*Baker*).

This is the commonest and most widespread *Halictus* in the Archipelago, extending from Luzon to Mindanao and Palawan. A specimen from Los Baños carries a manuscript name given by Friese.

Halictus philippinensis var. *nigritarsellus* var. nov.

Male.—Hind tarsi dark; flagellum dark or dusky beneath. The tarsi are entirely without yellow, but the last joint is ferruginous apically. Type of the variety from Pagsanhan, Laguna Province; others from Mount Maquiling and Los Baños, Luzon. All from Baker.

Halictus thoracicus *sublustrans* subsp. nov.

Female.—Length, about 6 millimeters; similar to *H. thoracicus* Friese, from Java, but with the abdomen shining and tegulæ, stigma, and nervures piceous or black. The dense tomentum on the postscutellum is white, often with a delicate ochereous tint. The species is very peculiar for the wholly dull area of the metathorax, with large reticulations, and especially for the sculpture of the mesothorax, which appears rough under a lens but under the microscope is seen to have a raised network or cancellation all over, entirely different from the fine tessellation often seen on the thorax of bees.

LUZON, Nueva Viscaya Province, Imugan (*Baker*), 5 (including the type): Mount Banahao (*Baker*), 2. PANAY, Antique Province, Culasi (*McGregor*), 3, at flowers of *Homalanthus populneus* Pax, June 3, 1918.

Halictus thoracicus var. *merescens* var. nov.

Female—Tegulae rufous or rufotestaceous, sometimes darker; stigma reddish brown to dark brown.

LUZON, Mount Banahao (*Baker*) 7; Los Baños (type locality of variety) (*Baker*), 3; Mount Maquiling (*Baker*), 5. PANAY, Antique Province, Culasi (*McGregor*), 1, at flowers of *Homalanthus populneus* Pax, June 3, 1918. LEYTE, Tacloban (*Baker*), 1. MINDANAO, Davao (*Baker*), 1.

I have seen true *H. thoracicus* Friese from Buitenzorg, Java (*Bryant and Palmer*).

Halictus banahaonis Cockerell.

Halictus banahaonis COCKERELL, Ann. & Mag. Nat. Hist. VIII 14 (1914) 365; 15 (1915) 264; CRAWFORD, Proc. Ent. Soc. Washington 19 (1918) 169.

LUZON, Mount Banahao (*Baker*), 4; Paete (*Baker*), 1.

The hind margin of the first abdominal segment is lineolate, not punctured all over as in *baguionis* Crawford, contrary to the statement in Crawford's table, loc. cit.

Halictus banahaonis var. *macerula* var. nov.

Female.—Smaller; anterior wing, about 5 millimeters long (about 6 millimeters in type); length of insect, 6 to 6.5 millimeters.

LUZON, Mount Banahao (*Baker*), 18. The difference of size and bulk is very conspicuous, and the two lots are uniform. Presumably the two forms are adapted to different flowers. The type of the variety is *Baker 2556*.

Halictus eschsoltzi sp. nov.

Halictus manilæ STRAND (not of Ashmead), Berl. Ent. Zeitschrift 54 (1909) 210; CRAWFORD, Proc. Ent. Soc. Washington 19 (1918) 169.

Female (type).—Length, about 7 to nearly 9 millimeters; black, with the tubercles yellow; mandibles bright chestnut red, except at base; knees, tibiae, and tarsi reddish yellow, or the anterior tibiae light red with a yellow stripe, the middle and hind tibiae and hind basitarsi each with a large dusky area; flagellum red beneath, and scape with a red basal spot; hair of head and thorax ochraceous, abundant on thorax, forming a fine down on mesothorax, conspicuous in certain lights, not in others, but sides of mesothorax with dense bands of tomentum, posteriorly extending narrowly in front of scutellum; mesothorax dull, it and the scutellum very minutely rugosely

punctate; area of metathorax rather large, dull, microscopically rugose, with a slight tendency to plication basally; tegulae testaceous, with a yellow spot; wings hyaline, with pale ferruginous stigma and nervures; first recurrent nervure joining second submarginal cell some distance before its end; third submarginal cell much broader in middle than second; outer recurrent and transverse cubital weakened; posterior face of metathorax densely covered with hair; legs with pale ochreous hair; hind spur with four long slender spines and a fifth rounded rudiment; abdomen broad, moderately shining, with a sericeous surface; basal part of first segment with dense pale ochreous hair, and segments 2 to 4 with dense basal bands; ventral segments polished and shining basally.

Male.—Length, about 6.5 millimeters; clypeus with a broad yellow apical band; labrum yellow; mandibles broadly yellow in middle, but with a black spot at base; scape yellow in front; flagellum rather long; dark areas on tibiae smaller, and hind basitarsi all yellow; hind margins of abdominal segments very narrowly fulvous; apical plate very broad and rounded; third ventral segment with a dense stiff brush of whitish hair along the margin, not reaching the sides.

LUZON, Laguna Province, Los Baños (*Baker*), type locality; Mount Maquiling (*Baker*); Pagsanhan (*Baker*), the male described and 2 females: Manila (*Eschscholtz*), type of *H. manilæ* Strand. MINDANAO, Cagayan (*Baker*); Dapitan (*Baker*).

A male from Mount Maquiling is *Baker* 2560. A very distinct species, on account of the color of the legs resembling *H. roepkei* Friese, from Java.

Halictus opisthochlorus sp. nov.

Female.—Length, nearly 7 millimeters; anterior wing, 4.75 millimeters; black, with the upper part of the metathorax dark blue-green; pubescence scanty, face with inconspicuous dark fuscous hairs, mesothorax almost bare, sides of thorax with thin white hair, abdomen without hair bands or patches, but with a scopa of long, white, curled hairs on ventral surface; head broad and short; antennae black, scape reaching to level of ocelli; face and front dullish with a sericeous luster; mesothorax and scutellum dullish, with a sericeous luster and without evident punctures; area of metathorax with very fine striae, appearing granular under a lens; posterior truncation not sharply defined; tegulae brownish black; wings dusky hyaline, strongly iridescent; stigma and nervures piceous; second and

third submarginal cells about the same size, high and narrow, together smaller than first; first recurrent nervure meeting first transverse cubital; legs black, inner side of hind tarsi with bright ferruginous hair; hind spur pectinate; abdomen shining black, without evident punctures. The abdomen is like that of *H. melanuroops*.

LUZON, Mountain Province, Baguio (*Baker*). This species and the next two show a general relationship to some of the Australian forms. On the other hand, *H. baguionis* Crawf. is related to the Formosan *H. perangulatus* Ckll.; so we have in the Philippines a meeting place of northern and southern groups of the genus.

Halictus caroli sp. nov.

Female.—Length, 6 millimeters; black, with broad abdomen; hair of head and thorax white, abundant at sides of thorax and long on clypeus; antennæ black, with basal half of scape red in front; inner orbits rather strongly concave; face and front dullish; mesothorax and scutellum dull, without evident punctures; area of metathorax dull and granular, a little shining at apex, where there is a median sulcus; tegulæ pale testaceous; wings faintly dusky, nervures and stigma piceous; second and third sumarginal cells high and narrow, about equal; first recurrent nervure joining second submarginal cell near end; legs black, small joints of tarsi ferruginous; abdomen black, shining, without bands or patches of tomentum; venter with a scopa of long curled hairs, tinged with ochreous at sides.

PALAWAN, Puerto Princesa; sent by Prof. C. F. Baker, after whom it is named.

Halictus mcgregori sp. nov.

Female.—Length, 7 millimeters; black, with broad abdomen; hair of head and thorax scanty, but dense and dull white on tubercles, and sides of metathorax with a conspicuous white fringe; head broad, clypeus short; antennæ black; supraclypeal area strongly convex; face and front moderately shining; mesothorax and scutellum dull, without evident punctures; area of metathorax large, entirely opaque, faintly striate at sides toward base; posterior truncation hairy; tegulæ ferruginous; wings dusky, nervures and stigma piceous; second and third submarginal cells high and narrow; first recurrent nervure meeting second transverse cubital; legs black, hind tibiæ and tarsi with black hair on outer side and fulvous on inner; hind spur with a few large teeth; abdomen dullish, without band or

patches of tomentum; venter with a scopa of long curled hairs and large patches of pale fulvous hair at sides of segments.

PANAY, Antique Province, Culasi (*McGregor*), type, June 3, 1918. LUZON, Laguna Province, Mount Maquiling (*Baker*), 1.

Halictus oligostictus sp. nov.

Female.—Length, nearly 8 millimeters; very robust; black, pubescence scanty, fringe of tubercles dense and tinged with ochereous; antennæ black, the flagellum faintly reddish apically; clypeus with large punctures; front dullish, finely punctured and substriate; mesothorax and scutellum dull, with large, widely scattered punctures, very few on scutellum; area of metathorax dull, with strong longitudinal plicæ; posterior truncation finely tomentose, sharply defined above and at sides; prothorax with prominent tubercular and anterolateral angles; tegulæ black; wings slightly dusky, stigma and nervures picuous; first recurrent nervure meeting second transverse cubital; third submarginal cell more than twice as long (broad) as second; legs black; hind tibiæ and tarsi with black hair on outer side and pale yellowish hair on inner; hind spur with a few large spines; abdomen very broad, shining black, without evident punctures; second segment with a narrow patch of dull white tomentum on each side basally; venter with pale hair, but no long curled scopa or lateral patches.

LUZON, Mount Banahao (*Baker*).

Halictus lionotulus sp. nov.

Female.—Length, about 5.5 millimeters; black, with rather narrow thorax; hair of head and thorax dull white, not abundant; face narrowed below; clypeus and supraclypeal area shining, sides of face with dense grayish white hair; flagellum obscurely brown beneath; mesothorax and scutellum polished and shining, without conspicuous punctures; area of metathorax dull, with fine plicæ, the rounded apical margin shining; posterior truncation very hairy; tegulæ bright fulvous; wings dusky, stigma and nervures dusky reddish brown, not dark; outer recurrent and transverse cubitals much weakened; type with only two submarginal cells, the second transverse cubital absent, but another female, evidently of the same species, has three submarginals, the third broader than the second, but not twice as broad (the male also has three submarginals); legs black or dark brown, with much white hair, that on hind tibiæ entirely white; hind basitarsi with white hair, but with an orange brush at apex; mesopleura polished and shining; abdomen

shining, without evident punctures, hind margins of segments rather narrowly hyaline; the cotype (but not the type) shows some pale tomentum at extreme bases of second and third segments; fifth segment covered with white hair; venter with stiff white hair, but no curled scopa or lateral patches.

Male.—Length, about 5 millimeters; slenderer, flagellum not elongated, clypeus all black.

LUZON, Mount Maquiling (*Baker*), 2 females and 1 male. The type is a female.

Halictus scintillans sp. nov.

Female.—Length, about 6 millimeters; like *H. lionotulus*, but larger, with the hind margins of the abdominal segments not hyaline, and the area of the metathorax without distinct striæ, except at the extreme base, where they are very delicate.

LUZON, Mount Banahao (*Baker*), 1. It is quite likely that additional material will prove this to be only a local race or variety of *H. lionotulus*.

Halictus scapalis sp. nov.

Male.—Length, about 8 millimeters; black, robust, having the general form and superficial appearance of *H. oligostictus*; head very large, face extremely broad; cheeks very broad; mandibles ferruginous, black at base and apex; face and front glistening, with short pale ochereous hair; labrum chestnut red, with a pair of prominent projecting tubercles; clypeus closely punctured, with a median smooth raised band; scape slender and curved, basal half red; a groove running between the posterior ocelli; mesothorax and scutellum polished and shining, the mesothorax with rather close delicate punctures, the scutellum very sparsely punctured; area of metathorax well defined, shining, its basal half with strong regular plicæ; thorax with pale ochereous hair; mesopleura dullish, finely lineolate; tegulae reddish; wings slightly dusky; stigma rather small, dark reddish, nervures brown; first recurrent nervure joining second submarginal cell before its end; third submarginal cell very broad, much larger than second; outer nervures distinct; legs dark brown or nearly black, with pale ochereous hair, anterior knees red, tarsi ferruginous apically; abdomen broad, shining, first segment without evident punctures, second finely punctured; pale tomentum at sides of base of segments 2 to 4; apical plate reddish, very broad and rounded. Flagellum short and abdomen broad as in females.

LUZON, Mount Banaho (*Baker*). A remarkable species.

Halictus postlucens sp. nov.

Female.—Length, about 7 millimeters; black, with pale ochereous hair; head ordinary; face glistening, clypeus with a depression at apical middle; front dull, narrowly shining along orbits; antennæ black; scutellum with fuscous hair, postscutellum with pale tomentum; mesothorax and scutellum shining, sparsely and finely punctured; area of metathorax poorly defined, glistening, with feeble, raised lines, and apically distinct traces of transverse striæ; posterior truncation well defined, smooth and shining; tegulæ piceous, with a reddish spot; wings dusky, stigma and nervures dull reddish, not dark; first recurrent nervure joining basal corner of third submarginal cell; third submarginal cell considerably larger and broader than second, though second is fairly broad; legs black, with pale ochereous hair, tarsi reddened at apex; abdomen shining, without evident punctures; some pale tomentum at bases of second and following segments; venter with pale ochereous hair, not forming a long curled scopa or lateral patches.

LUZON, Mountain Province, Baguio (*Baker*).

Halictus fulvovittatus sp. nov.

Female.—Length, 6 to 6.3 millimeters; black, the hind margins of the abdominal segments broadly testaceous or pale golden, the bands shading into ferruginous along their anterior margins, the bands on first two segments broader in the middle than at the sides; hair of head and thorax white with a creamy tint, dense on upper border of prothorax laterally, on margins of tubercles, and on postscutellum, thin on face; head ordinary; mandibles dark red in middle; flagellum obscurely reddish beneath; middle of clypeus depressed and punctured; a shining line along anterior orbits; mesothorax and scutellum finely and rather closely punctured; area of metathorax finely but very distinctly striate on basal half; posterior truncation with long hair and without sharp margins; tegulæ bright fulvous; wings faintly dusky, nervures and stigma dilute reddish sepia; first recurrent nervure joining second submarginal cell near apex; third submarginal cell larger than second, but higher than broad; knees and small joints of tarsi ferruginous; hind tibiæ and tarsi dull reddish; hind spur with three stout teeth; abdomen broad, conspicuously thinly hairy, but without bands or patches of tomentum; venter with short hair, but no curled scopa or lateral patches.

LUZON, Laguna Province, Mount Maquiling (*Baker*), 2.

Halictus davaonis sp. nov.

Female.—Length, about 6.5 millimeters; black, differing from *H. fulvovittatus* thus: Head broader; area of metathorax with a double sculpture of exceedingly delicate striæ all over and coarse rugæ basally; legs black, with red knees; pale marginal tegumentary bands on abdomen much narrower, those on first two segments not enlarged in middle.

MINDANAO, Davao (*Baker*), 2. Closely related to the last, but surely a distinct species.

Halictus melanurops sp. nov.

Female.—Length, about 7 millimeters; black, with little hair; abdomen polished and shining, without bands or patches of tomentum; head broad; clypeus dull basally, apically shining and with large punctures; supraclypeal area dull; front dull, densely punctured; sides of vertex closely punctured; antennæ black; cheeks striate, with a large polished shining space on lower part; mesothorax and scutellum dullish, finely punctured, the punctures very irregular on scutellum; area of metathorax longitudinally plicate; posterior truncation shining, not sharply bounded at sides; mesopleura dull; tegulæ black; wings dusky, stigma and nervures brown; first recurrent nervure meeting second transverse cubital; third submarginal cell not much larger than second, both rather broad; legs black; hind tibiæ with fuscous hair on outer side and white hair on inner, hair on inner side of hind basitarsi white; abdomen with stiff hair on venter, but no curled scopa or lateral patches; along the apical margin of the covered portion on dorsal segments 2 to 4 is a very fine fringe of plumose white hairs, forming a very delicate line.

Male.—Very similar but smaller; clypeus all black; flagellum elongated and submoniliform, as in typical *Halictus* males; tarsi dark.

LUZON, Mount Banahao (*Baker*), 1 female, type: Nueva Vizcaya Province, Imugan (*Baker*), 1 female: Mountain Province, Baguio (*Baker*), 1 male.